0 .	For receiving Office use only			
0-1	International Application No.			
0-2	International Filing Date			
	•			
0-3	Name of receiving Office and "PCT International Application"			
0-4	Form - PCT/RO/101 PCT Request	·		
0-4-1	Prepared Using	PCT-SAFE [EASY mode] Version 3.50 (Build 0002.162)		
0-5	Petition			
	The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty			
0-6	Receiving Office (specified by the applicant)	United States Patent and Trademark Office (USPTO) (RO/US)		
0-7	Applicant's or agent's file reference	5504-1189		
i	Title of Invention	VUV-EXCITED DEVICE WITH BLUE-EMITTING		
		PHOSPHOR		
II -	Applicant			
II-1	This person is:	applicant only		
11-2	Applicant for	all designated States except US		
11-4	Name:	OSRAM SYLVANIA INC.		
II-5	Address:	100 Endicott Street		
	Į.	Danvers, Massachusetts 01923		
		United States of America		
II-6 	State of nationality	US		
11-7	State of residence	US .		
11-8	Telephone No.	978-750-2312		
11-9	Facsimile No.	978-750-2045		
III-1	Applicant and/or inventor			
111-1-1	This person is:	applicant and inventor		
III-1-2	Applicant for	US only		
III-1 - 4	Name (LAST, First)	MARKING, Gregory		
III-1-5	Address:	210 So. Pennsylvania Avenue		
		Sayre, Pennsylvania 18840		
W 4.6		United States of America		
III-1-6	State of nationality	us		
III-1-7	State of residence	US		

III-2	Applicant and/or inventor			
III-2-1	This person is:	applicant and inventor		
111-2-2	Applicant for	US only		
111-2-4	Name (LAST, First)	CHAU, Chung-Nin		
111-2-5	Address:	111 Walnut Street		
•		Apt. #3		
•		Athens, Pennsylvania 18810		
		United States of America		
111-2-6	State of nationality .	បន		
111-2-7	State of residence	US		
111-3	Applicant and/or inventor			
111-3-1	This person is:	applicant and inventor		
111-3-2	Applicant for	US only		
111-3-4	Name (LAST, First)	SNYDER, Thomas		
111-3-5	Address:	R.R. Box 1472		
		Laceyville, Pennsylvania 18623		
	·	United States of America		
111-3-6	State of nationality	us		
III-3-7	State of residence	US		
111-4	Applicant and/or inventor			
111-4-1	This person is:	applicant and inventor		
111-4-2	Applicant for	US only		
111-4-4	Name (LAST, First)	NORTHROP, Shellie K.		
111-4-5	Address:	Larch Road		
		Apt. 4		
		Sayre, Pennsylvania 18840		
		United States of America		
111-4-6	State of nationality	US		
111-4-7	State of residence	us		
III-5	Applicant and/or inventor			
III-5-1	This person is:	applicant and inventor		
111-5-2	Applicant for	US only		
III-5 - 4	Name (LAST, First)	FAN, Chen-Wen		
111-5-5	Address:	214 Sharon Avenue		
		Sayre, Pennsylvania 18840		
		United States of America		
111-5-6	State of nationality	us		
		1		

IV-1	Agent or common representative; or address for correspondence		
	The person identified below is hereby/	agent	
	has been appointed to act on behalf of the applicant(s) before the competent		
	International Authorities as:		
IV-1-1	Name (LAST, First)	CASTEL, Benoît	
IV-1-2	Address: .	c/o YOUNG & THOMPSON	
		745 South 23rd Street	
•		Arlington, Virginia 22202	
		United States of America	
IV-1-3	Telephone No.	703-521-2297	
IV-1-4	Facsimile No.	703-685-0573	
IV-1-5	e-mail .	embon@pipeline.com	
IV-1-6	Agent's registration No.	35,041	
V	DESIGNATIONS		
V-1	The filing of this request constitutes under Rule 4.9(a), the designation of	· ,	
	all Contracting States bound by the		
	PCT on the international filing date,		
	for the grant of every kind of protection available and, where		
	applicable, for the grant of both		
	regional and national patents.		
VI-1	Priority claim of earlier national application		
VI-1-1	Filing date	15 May 2003 (15.05.2003)	
VI-1-2	Number	60/470,635	
VI-1-3	Country	us	
VI-2	Priority claim of earlier national		
VI-2-1	application Filing date	 15 May 2003 (15.05.2003)	
VI-2-2	Number	60/470,734	
VI-2-3	Country	US .	
VI-3	Priority document request		
	The receiving Office is requested to	77 1 77 2	
	prepare and transmit to the International	VI-1, VI-2	
	Bureau a certified copy of the earlier application(s) Identified above as		
	item(s):	·	
VII-1	International Searching Authority	United States Patent and Trademark	
	Chosen		

VIII	Declarations	Number of declarations		
VIII-1	Declaration as to the identity of the inventor	-		
VIII-2	Dedaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent			
VIII-3	Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application	-		
VIII-4	Declaration of inventorship (only for the purposes of the designation of the United States of America)	-		
VIII-5	Declaration as to non-prejudicial disclosures or exceptions to lack of novelty	-		
IX	Check list	number of sheets	electronic file(s) attached	
IX-1	Request (including declaration sheets)	5	1	
IX-2	Description	13	_	
IX-3	Claims	. 3		
IX-4	Abstract	. 1	/ .	
IX-5	Drawings	1	-	
IX-7	TOTAL	23		
	Accompanying Items	paper document(s) attached	electronic file(s) attached	
IX-8	Fee calculation sheet		-	
IX-17	PCT-SAFE physical media	-	V	
IX-19	Figure of the drawings which should accompany the abstract	1		
IX-20	Language of filing of the international application	English		
X-1	Signature of applicant, agent or common representative	Benit Castel		
X-1-1	Name (LAST, First)	CASTEL, Benoît		
X-1-2	Name of signatory			
X-1-3	Capacity			

Original (for SUBMISSION)

FOR RECEIVING OFFICE USE ONLY

10-1	Date of actual receipt of the purported international application	·
10-2	Drawings:	
10-2-1	Received	•
10-2-2	Not received	·
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application	
10-4	Date of timely receipt of the required corrections under PCT Article 11(2)	
10-5	International Searching Authority	ISA/US
10-6	Transmittal of search copy delayed until search fee is paid	

FOR INTERNATIONAL BUREAU USE ONLY

11-1	Date of receipt of the record copy by	 	
	the International Bureau		

PCT (ANNEX - FEE CALCULATION SHEET) Original (for SUBMISSION) (This sheet is not part of and does not count as a sheet of the international application)

0	For receiving Office use only			
0-1	International Application No.			
0-2	Date stamp of the receiving Office			
				
0-4	Form PCT/RO/101 (Annex) PCT Fee Calculation Sheet			
0-4-1	Prepared Using	PCT-SAFE [EAS:	Y model	
	3		(Build 0002.162	2)
0-9	Applicant's or agent's file reference	5504-1189	·	·
2	Applicant	OSRAM SYLVANIZ	A INC.	
12	Calculation of prescribed fees	fee amount/muliplier	Total amounts (USD)	
12-1	Transmittal fee T	₽ .	300	
12-2-1	Search fee S	₽	1000	-
12-2-2	International search to be carried out by	បន		
12-3	International filing fee			
,	(first 30 sheets) I1	1134		
12-4	Remaining sheets	0		
12-5	Additional amount (X)	0		
12-6	Total additional amount 12	0		
12-7	i1 + i2 = i	1134		
12-12	EASY Filing reduction R	-81		
12-13	Total International filing fee (i-R)	5)	1053	
12-14	Fee for priority document			**************************************
	Number of priority documents requested	2		
12-15	Fee per document (X)	20		
12-16	Total priority document fee: P	₽	40	
12-17	TOTAL FEES PAYABLE (T+S+I+P)	₽	2393	
12-19	Mode.of payment	authorization	to charge depo	sit account
12-20	Deposit account instructions			
	The receiving Office	United States Office (USPTO	Patent and Tra) (RO/US)	ademark
12-20-1	Authorization to charge the total fees indicated above.	1		
12-20-2	Authorization to charge any deficiency or credit any overpayment in the total fees indicated above.	/		
12-20-3	Authorization to charge the fee for priority document.	✓ .		
12-21	Deposit account No.	25-0120		
12-22	Date	13 May 2004 (13.05.2004)		
12-23	Name and signature	CASTEL, Benoî	t .	
	·	Benoit Cas	tel	

13-2-7	Validation messages Contents	Yellow! The power of attorney or a copy of the general power of attorney will need to be furnished unless all applicants sign the request form.
13-2-9	Validation messages Payment	Green? Please ensure that you have a valid deposit account with the receiving Office selected.

Blue-emitting phosphors for use with plasma display panels (PDP) or other vacuum ultraviolet-excited (VUV) devices are provided. These blacking phosphors and mixtures ther a clude at least a europium-activate calcium-substituted barium hexa-aluminate (CBAL) phosphor. Preferably, the CBAL phosphor has a compositio which may be represented by the formula: $Ba_{1.29-x-y}Ca_xEu_yAl_{12}O_{19.29}$, wherein 0 < x < 0.25 and 0.01 < y < 0.20. These blue-emitting phosphors exhibit improved degradation characteristics, including reduced color shift and increased intensity maintenance, under conditions found in VUV-excited devices.